

WHAT IS CLAIMED IS:

1. A turbocharger (1) comprising:
a shaft (18)
for mounting one rotor on each end thereof,
a bearing housing (4) for supporting said shaft (18), and
a turbine housing (2), an opening of which is arranged
opposite the bearing housing (4) wherein an end portion
(5) of the bearing housing (4) is susceptible to be
fastened on wall portions (33) of the turbine housing
which are adjacent to said opening,
characterized in that
in the area between said end portion (5) of the bearing
housing (4) and the turbine housing (2) is provided at
least one refractory sealing (17, 31) of mineral material
or metal.
2. Turbocharger as claimed in claim 1, characterized in that
said bearing housing (4) includes a flange (5) which is
susceptible to be inserted into recess in the wall portion
(33) complementary to it, and in that the refractory
sealing (17), which comprises a mineral or metallic
material is provided between said flange (5) and said
recess in the wall portion (33).
3. Turbocharger as claimed in claim 2, characterized in that
said sealing (17), which constitutes a ring, is positioned
against an outwardly facing surface of the flange (5),
e.g. its peripheral surface.
4. Turbocharger as claimed in claim 2, characterized in that
said sealing (17, 17', 17'') is positioned against a
surface (5') of the flange (5) of the bearing housing (4)
which surface (5') faces the turbine housing (2), i.e. a

surface oriented in axial direction, and in that said ring sealing (17') constitutes a crimped ring, preferably a half-crimped ring, having two sections (17a, 17b) which abut flat onto respective surfaces (5' and 23) of the bearing housing (4) and the turbine housing (2).

5. Turbocharger according to claim 4, characterized in that said ring sealing (17'') is bent in cross section, and has a circumferential slot (41) and is positioned against an open circular groove (37) of one of the housings (4), wherein the circular slot (41) is oriented preferentially within a radial plane, and is turned radially inward with reference to the turbine shaft(R).
6. Turbocharger according to any one of the preceding claims, characterized in that the refractory sealing of mineral material or metal (17, 31) consists of mica, graphite and/or of a metal.
7. Turbocharger according to any one of the preceding claims, characterized in that it comprises a guiding grid of variable turbine geometry, which is susceptible to be controlled by means of a control shaft (24) which is supported by the turbine housing (2) or by the bearing housing (4), and in that said control shaft (24) is received within a divided bushing (28), between the two parts (29, 30) of which is positioned said sealing of mineral material or metal, preferably of graphite.
8. Turbocharger according to claim 7, characterized in that at least one of the portions (29, 30) of bushing (28) comprises a hollow cylindrical edge projection (34) which accommodates said sealing (31).

9. Method of manufacturing the turbocharger of claims 6 or 7, characterized in that firstly, the control shaft (24) as well as said two bushing portions (29, 30), having said broader, deformable sealing (31) between them, are introduced into flange (5), so that at least one of said bushing portions (29, 30) projects beyond said flange (5), and then applying pressure onto said one projecting bushing portion in a way that said pressure is communicated to said sealing (31), whereupon said sealing fills possibly existing orifices.